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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,063	01/11/2007	Syunichi Ishii	284371US0PCT	3928
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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER STULIL, VERA	
			ART UNIT 1781	PAPER NUMBER
			NOTIFICATION DATE 01/21/2011	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/564,063

Applicant(s)

ISHII ET AL.

Examiner

VERA STULII

Art Unit

1781

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-912)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

Claims 17-20 are objected to for the use of 'NIBEM' without providing the full form of the term in the claims. Applicant is urged to include the full form of the abbreviated terms at least for the purpose of clarifying the claims.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 5, 9, 10 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu et al (US 5,387,425) in view of Boni et al (EP 962522).

In regard to claims 1, 5, 9, 10 and 17, Hsu et al discloses a method for production of a fermented alcoholic malt beverage and the beverage prepared by this method (Abstract).

In regard to the "improved foaming properties" recitation in the preamble of claim 1, Hsu et al discloses addition of the "foaming proteins" to the malt beverage to enhance

the amount and persistence of the foam head on a fermented malt beverage (Col. 1 lines 10-14).

In regard to the method steps recited in claims 1, Hsu et al discloses:

- mashing by mixing ground malt and warm water until it forma a malt mash of a porridge-like consistency.(Col. 1 lines 10-14, 56-60);
- obtaining clear wort by removal of liquid (wort) from the insoluble husks (Col. 2 lines 9-21);
- boiling and hopping the wort (adding hops during wort boiling) (Col. 2 lines 24-34).
- fermenting boiled wort using brewers yeast (Col. 2lines 40-50).
- additional filtration steps (Col. 2 lines 65-66).
- addition of proteins before final filtration (Col. 6 lines 12-19).

In regard to the "malts and adjuncts" recitation in line 3 of claim 1, Hsu et al also discloses using adjuncts along with malts as a source of fermentable sugars (Col. 1 lines 56-60). In regard to the specific point of protein addition, Hsu et al discloses that "[p]referably foaming proteins are added to the beer in the later stages of the brewing process in-line after primary filtration and before final filtration" (Col. 6 lines 12-1"). Therefore, Hsu et al discloses adding proteins to the alcoholic beverage before the final filtration(i.e. between steps (d) and (e) to the alcoholic beverage).

Hsu does not disclose that proteins are derived from peas. Boni et al discloses use of proteins in the beer production. Boni et al discloses that proteins could be obtained from various "vegetable material such as peas, beans, grains, etc. One of

ordinary skill in the art would have been motivated to modify Hsu et al and to use proteins obtained from peas as disclosed by Boni et al. One of ordinary skill in the art would have been motivated to do so, since Boni et al discloses use of proteins obtained from grains in beer production and Hsu et al discloses proteins obtained from wheat and barley in the beer production. Both references disclose grains as a source of vegetable protein. In addition, Boni et al discloses peas as a source of vegetable protein. Therefore, to substitute one protein derived from plant material with another protein derived from plant material would have been obvious. One of ordinary skill in the art would have been motivated to use any variety of peas, including green peas, based on the availability, price and other factors.

In regard to claim 5, Hsu et al discloses the beverage prepared by the method as discussed above.

In regard to claims 9 and 10, it is noted that , one of ordinary skill in the art would have been motivated to use any variety of peas, including green or yellow peas, based on the availability, price and other factors.

Regarding the NIBEM value recitation in claim 17, it is noted that although the references do not specifically disclose every possible quantification or characteristic of its product, such as NIBEM value, this characteristic would have been expected to be as claimed absent any clear and convincing evidence and/or arguments to the contrary. The combination of references disclose the same starting materials and methods as instantly (both broadly and more specifically) claimed, and thus one of ordinary skill in the art would recognize that the NIBEM value among many other characteristics of the

product obtained by referenced method, would have been an inherent result of the process disclosed therein. The Patent Office does not possess the facilities to make and test the referenced method and product obtain by such method, and as reasonable reading of the teachings of the references has been applied to establish the case of obviousness, the burden thus shifts to applicant to demonstrate otherwise.

Claims 2-4, 6-8, 11-16 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oono (WO 2004/000990) in view of Boni et al (EP 962522).

Oono (US 2005/0220935) is relied upon as an English translation of WO 2004/000990.

In regard to claims 2, 3 and 4, Oono discloses a method for preparation of an alcoholic beverage by preparing a pre-fermentation liquid using syrup containing sources of carbon ([0014]-[0018]), nitrogen ([0019]-[0023]), hops ([0024]-[0026]), coloring matter ([0027]-[0028]), foam formation and head retention enhancing substances ([0029]-[0030]). Oono discloses fermentation of pre-fermentation liquid ([0039], [0043]) and further filtering step ([0043]). In regard to the "improved foaming properties" recitation in the preamble of claim 2, Oono discloses proteinic substances as foam formation and head retention enhancing substances. In regard to claims 6-8, Oono discloses alcoholic beverage prepared by the method described above.

In regard to claims 2, 3 and 4, Oono discloses adding foam formation and head retention enhancing substances to the pre-fermentation liquid ([0039]).

Oono does not disclose proteins derived from peas. Boni et al discloses use of proteins in the beer production. Boni et al discloses that proteins could be obtained from various "vegetable material such as peas, beans, grains, etc. One of ordinary skill in the art would have been motivated to modify Oono and to use proteins obtained from peas as disclosed by Boni et al. One of ordinary skill in the art would have been motivated to do so, since Boni et al discloses use of proteins in beer production and Oono et al discloses proteinic substances used in the beer production.

In regard to claims 6, 7 and 8, Oono discloses the beverage prepared by the method as discussed above.

In regard to claims 11-16, it is noted that , one of ordinary skill in the art would have been motivated to use any variety of peas, including green or yellow peas, based on the availability, price and other factors.

Regarding the NIBEM value recitation in claims 18-20, it is noted that although the references do not specifically disclose every possible quantification or characteristic of its product, such as NIBEM value, this characteristic would have been expected to be as claimed absent any clear and convincing evidence and/or arguments to the contrary. The combination of references disclose the same starting materials and methods as instantly (both broadly and more specifically) claimed, and thus one of ordinary skill in the art would recognize that the NIBEM value among many other characteristics of the product obtained by referenced method, would have been an inherent result of the process disclosed therein. The Patent Office does not possess the facilities to make and test the referenced method and product obtain by such method, and as reasonable

reading of the teachings of the references has been applied to establish the case of obviousness, the burden thus shifts to applicant to demonstrate otherwise.

Claims 2-4, 6-8, 11-16 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bavisotto et al (US 3,720,517) in view of Boni et al (EP 962522).

In regard to claims 2-4, Bavisotto et al discloses preparation of an alcoholic beverage by forming a malt-based liquid containing a fermentable carbohydrate from one or more sources; a food grade material having a high soluble protein or amino acid content; malt and hops or hop extract (Col. 1 lines 35-40). Bavisotto et al discloses using malts or malt extracts along with sugars (dextrose, fructose, sucrose, etc), where malts also serve as a coloring agent (Col. 1 lines 43-45; Example 1; Claim 1). Bavisotto et al also disclose boiling malt based liquid with hops, cooling, adding yeast, fermenting, and further filtering to separate solids from a fermented mixture (Col. 1 bottom paragraph--Col. 2 top paragraph; Col. 2 bottom paragraph--Col. 3 top paragraph). In regard to the preferred food grade material having a high soluble protein or amino acid content, Bavisotto et al discloses material derived from soy beans, such as soya flakes (Col. 2 lines 11-12). In regard to claims 6-8, Bavisotto et al discloses alcoholic beverage prepared by the method described above.

Bavisotto et al does not disclose that proteins are derived from peas. Boni et al discloses use of proteins in the beer production. Boni et al discloses that proteins could be obtained from various "vegetable material such as peas, beans, grains, etc. One of ordinary skill in the art would have been motivated to modify Bavisotto et al and to use

proteins obtained from peas as disclosed by Boni et al. One of ordinary skill in the art would have been motivated to do so, since Boni et al discloses use of proteins obtained from grains and peas in beer production and Bavisotto et al discloses proteins obtained from soy beans in the beer production. Therefore, to substitute one protein derived from plant material with another protein derived from plant material would have been obvious. One of ordinary skill in the art would have been motivated to use any variety of peas, including green peas, based on the availability, price and other factors.

In regard to claims 2, 3 and 4, Bavisotto et al discloses adding protein substances to aqueous medium prior to fermentation, therefore discloses addition of proteins to the pre-fermentation liquid (Col. 2 lines 12-16).

In regard to claims 6, 7 and 8, Bavisotto et al discloses the beverage prepared by the method as discussed above.

In regard to claims 11-16, it is noted that , one of ordinary skill in the art would have been motivated to use any variety of peas, including green or yellow peas, based on the availability, price and other factors.

Regarding the foaming properties recitation in claims 2-4 and 7-8 and NIBEM value recitation in claims 18-20, it is noted that although the references do not specifically disclose every possible quantification or characteristic of its product, such as foaming properties and NIBEM value, these characteristics would have been expected to be as claimed absent any clear and convincing evidence and/or arguments to the contrary. The combination of references disclose the same starting materials and methods as instantly (both broadly and more specifically) claimed, and thus one of

ordinary skill in the art would recognize that the foaming properties and NIBEM value among many other characteristics of the product obtained by referenced method, would have been an inherent result of the process disclosed therein. The Patent Office does not possess the facilities to make and test the referenced method and product obtain by such method, and as reasonable reading of the teachings of the references has been applied to establish the case of obviousness, the burden thus shifts to applicant to demonstrate otherwise.

Response to Arguments

Applicant's arguments filed 11/01/2010 have been fully considered but they are not persuasive.

The rejection of claims 1-8 under 35 U.S.C. 112, second paragraph, has been withdrawn in light of the claims amendments.

On page 8 of the reply to the Non-Final Office action mailed 08/05/2010, Applicants restates the teachings of Hsu et al. On page 9 of the Reply, Applicants restates the teachings of Boni et al. In response to Applicants' arguments that Boni cannot provide a reasonable expectation of success for improving the foaming properties of an alcoholic beverage by adding pea protein, it is noted that Boni et al is relied upon as a teaching of use of proteins obtained from various "vegetable material such as peas, beans, grains" in the beer production. In regard to the "improved foaming properties" recitation in the preamble of claim 1, Hsu et al discloses addition of the "foaming proteins" to the malt beverage to enhance the amount and persistence of the foam head on a fermented malt beverage (Col. 1 lines 10-14). Therefore, Hsu et al is

relied upon as a teaching of foaming properties of proteins. Further in response to applicant's argument that Boni cannot provide a reasonable expectation of success for improving the foaming properties of an alcoholic beverage by adding pea protein, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Further in regard to the rejection over Hsu et al in view of Boni et al, it is noted that use of foaming proteins to impart foaming properties to the beverage were known, use of pea protein in the production of beer beverages were also known.

One of ordinary skill in the art would have been motivated to modify Hsu et al and to use proteins obtained from peas as disclosed by Boni et al. One of ordinary skill in the art would have been motivated to do so, since Boni et al discloses use of proteins obtained from grains in beer production and Hsu et al discloses proteins obtained from wheat and barley in the beer production. Both references disclose grains as a source of vegetable protein. In addition, Boni et al discloses peas as a source of vegetable protein. Therefore, to substitute one protein derived from plant material with another protein derived from plant material would have been obvious. One of ordinary skill in the art would have been motivated to use any variety of peas, including green peas, based on the availability, price and other factors.

Applicants make the same arguments regarding the rejection of claims over Oono in view of Boni et al. These arguments are not persuasive for the reasons as

stated above. In this case, Oono discloses a method for preparation of an alcoholic beverage by preparing a pre-fermentation liquid using foam formation and head retention enhancing substances ([0029]-[0030]). Oono discloses fermentation of pre-fermentation liquid ([0039], [0043]) and further filtering step ([0043]). In regard to the "improved foaming properties" recitation in the preamble of claim 2, Oono discloses proteinic substances as foam formation and head retention enhancing substances.

The same rationale applies to the arguments regarding the rejection over Bavisotto et al in view of Boni et al.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VERA STULII whose telephone number is (571)272-3221. The examiner can normally be reached on 7:00 am-3:30 pm, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Vera Stulii/
Examiner, Art Unit 1781

/Keith D. Hendricks/
Supervisory Patent Examiner, Art Unit 1781